

REMARKS/ARGUMENTS

In the Office Action mailed December 6, 2007, claims 1 – 7 were rejected and Figure 1 was objected to. In response, claims 8 – 11 have been added. Applicants hereby request reconsideration of the application in view of the new claims and the below-provided remarks.

Objections to Drawings

The current application is a U.S. National Stage application. The drawing requirements for U.S. National Stage applications are identified in MPEP 1825 and labeling of figures as "Prior Art" is not required (see PCT Rule 11.11). Further, MPEP 1893.03(f) states that "[t]he USPTO may not impose requirements beyond those imposed by the Patent Cooperation Treaty (e.g., PCT Rule 11)." In view of the above, Applicants respectfully assert that labeling Figure 1 as "Prior Art" is not required in the current application.

Response to Claim Rejections under 35 U.S.C 102(e)

Claims 1 – 7 were rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. (U.S. Pat. 7,200,799 B2, hereinafter Wang). Applicants respectfully submit that these claims are patentable over Wang for the reasons provided below.

Independent Claim 1

Claim 1 recites:

"A method for decoding data, said method comprising iterations with some steps (SISO1, SISO2) using windows (WID) of input data, characterized in that the method comprises, for a current window (WID) of a step (SISO1, SISO2) within an iteration the steps of:

Performing a forward recursion, wherein said forward recursion is **initialized** with a forward state metric vector (α) from the **upper stake** (STK) of a previous window of the same step (SISO1, SISO2) of a previous iteration, a window (WID) comprising a **lower** and an **upper stake** (STK), and

Performing a backward recursion, wherein said backward recursion is **initialized** with a backward state metric vector (α) from the **lower stake** (STK) of a next window of the same step (SISO1, SISO2) of a previous iteration. “ (emphasis added)

Applicants assert that claim 1 is not anticipated by Wang because Wang does not disclose initialization points called stakes, having an upper and lower feature (“lower stake” and “upper stake”), and being key elements in decoding of data in a WID (windows in decoding) environment.

Wang briefly acknowledges initialization and decoding by parallel processing blocks of data (Figure 4), but Wang does not disclose upper and lower initialization stakes and their role in the decoding. The reference to Wang in the Office action (Figure 3, column 4, line 21-column 5, line 24) does not disclose an “upper stake” or a “lower stake”. In particular, Wang describes:

“...The pre-computation $\beta 1$ unit starts backward recursive computation 310 on the second sliding window 302 with a constant initial value assigned to all states.” Column 4 lines 43-45; and

“By the end of the period t_3 , the computed forward state metrics are stored in a small buffer and will be used for computation of LLR/Lex in the next time slot.” Column 4 lines 47-49.

As can be seen from the above-provided passages, Wang does not disclose an “upper stake” or a “lower stake” as recited in claim 1. Because Wang does not disclose an “upper stake” or a “lower stake, Applicants respectfully assert that claim 1 is not anticipated by Wang.

Independent Claim 4

Claim 4 is an apparatus claim, which includes similar limitations as claim 1. Because of the similarities between claim 1 and claim 4, Applicants assert that the remarks provided above in regard to claim 1 apply also to claim 4. Accordingly, Applicants respectfully assert that independent claim 4 is not anticipated by Wang.

Dependent Claim 2

Claim 2 recites,

“A method as claimed in claim 1, characterized in that the forward state metric vector (α) computed last is stored in an upper stake of said current window (WID) during the forward recursion, and the backward state metric vector (β) computed last is stored in the lower stake (STK) of said current window (WID) during the backward recursion.”(emphasis added)

Claim 2 is allowable at least based upon an allowable base claim. Additionally, Applicants assert that claim 2 is not anticipated by Wang because Wang does not disclose stakes, having an upper and lower feature (“upper stake” and “lower stake”). In particular, Wang does not disclose that a “forward state metric vector (α) computed last is stored in an upper stake of said current window” and that a “backward state metric vector (β) computed last is stored in the lower stake (STK) of said current window.”

Dependent Claims 3, 5, 6, 7

Claims 3, 5, 6, and 7 are allowable at least based upon allowable base claims.

New Claims

New claims 8 – 11 depend on independent claims 1 and 4. Applicants respectfully assert that claims 8 – 11 are patentable over and are not anticipated by the cited reference because the cited reference does not disclose the limitations of the claims. Additional comments are as follows:

Dependent Claim 8

Claim 8 is an apparatus claim, which includes similar limitations as claim 2. Therefore, Applicants assert that the remarks provided above in regard to claim 2 also apply to claim 8. Accordingly, Applicants respectfully assert that claim 8 is not anticipated by Wang.

Dependent Claim 9

Claim 9 is an apparatus claim, which includes similar limitations as claim 3. Applicants assert that claim 3 is allowable at least based on an allowable base claim.

Dependent Claim 10

Claim 10 recites,

“A method as claimed in claim 1, characterized in that the **backward recursion is initialized with a metrics vector computed by a termination generator**, wherein the metric vector is a function of **tail bits**, and is processed.” (emphasis added)

Support for claim 10 is found in Applicants’ specification at, for example, paragraphs [0044] and [0061]. Applicants assert that claim 10 is not anticipated by Wang because Wang does not disclose a “termination generator” or “tail bits.” Accordingly, Applicants respectfully assert that claim 10 is not anticipated by Wang.

Dependent Claim 11

Claim 11 recites,

“A decoder for decoding data, as claimed in claim 4, said decoding characterized in that the **backward recursion is initialized** with a metrics vector computed by a **termination generator**, wherein the metric vector is a function of **tail bits**, and is processed.” (emphasis added)

Claim 11 is an apparatus claim, which includes similar limitations as claim 10. Therefore, Applicants assert that the remarks provided above in regard to claim 10 apply also to claim 11. Accordingly, Applicants respectfully assert that claim 11 is not anticipated by Wang.

CONCLUSION

Applicants respectfully request reconsideration of the claims in view of the remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-3444** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-3444** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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